

**Preliminary Amendment filed August 11, 2006
U.S. Patent Application Serial No. 09/884,998**

REMARKS

Claims 25 - 33 are currently pending in this patent application, claims 25 and 30 being independent claims.

Claims 25 and 30 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention.

The applicants submit that the Examiner's interpretation of the applicants' claimed soft layer is in error. As recited in each of independent claims 25 and 30, the applicants' claimed soft layer (the middle portion of the claimed core region and marked as element E (see attached comparative sketches)) is "between said inner and outer circumferential surfaces and being attached thereto." In the attached comparative sketches, labels A through E correspond to the following claimed elements in each of independent claims 25 and 30:

- A: claimed quench hardened layers;
- B: claimed core;
- C: claimed outer circumferential surface;
- D: claimed inner circumferential surface; and
- E: claimed soft layer.

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In Girardello's Figure 8, it is assumed that the outer (thicker) circumferential surface is the element composed of "MARTENSITE + SORBITE", while the inner (thinner) circumferential surface is the element composed of "FERRITE" and possibly further composed of the "BAINITE+FERRITE TRANSITION MIX." With this assumption, with regard to Girardello's Figure 8, it is clear that the soft layer, attached and between the inner and outer circumferential surfaces, is composed of "SORBITE" only.

Based on the above interpretation, the Examiner's reliance on lines 61 - 63, column 5 in Girardello is irrelevant. That is, such cited portion of Girardello describes the inner circumferential surface ("the inner one being much thinner and having intermediate structures such as for example pearlite, ferrite and others"), and does not describe the soft layer.

In view of the applicants' above understanding, the applicants have amended each of independent claims 25 and 30 so as to better clarify that the claimed core region is "attached to and between said inner and outer circumferential surfaces." The applicants have further highlighted, in each of independent claims 25 and 30, that the claimed soft layer is "composed of a structure including pearlite and bainite." The phrase "including pearlite and bainite" also covers "pearlite, bainite and martensite."

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The above amendments with the corresponding comments in support thereof are believed to place the claims in proper condition for examination, and condition for allowance. Early and favorable action is awaited.

In the event that any fees are due in connection with this paper, please charge our Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Petition for Extension of Time
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Comparative Sketches (w/ hand-written labels A,B,C,D,E)